

ACOUSTIC LOUDSPEAKER

ABSTRACT OF THE DISCLOSURE

An acoustic driver has a voice coil in which adjacent turns of the coil are spaced apart. The driver is placed at one end of a foam-lined, elongated structure, such as a tube. An opposing end of the structure is, in one embodiment, enclosed by a wall that is connected to the structure by a suspension so that it moves in sympathy with the driver. In another embodiment, the structure cooperates with the acoustic driver to form one or more restrictive passageways confined around the driver's motor and an inner surface of the structure. The passageway(s) couple a volume of air in the structure to the exterior of the structure in a manner that reduces the transmission of acoustic energy without creating alternating pressure within the structure that interferes with the movement of the voice coil's diaphragm, at its maximum points of excursion.